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Sequence Listing was accepted.

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Reviewer: markspencer

Timestamp: [year=2011; month=12; day=21; hr=11; min=0; sec=3; ms=909; ]

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Application No: 10582115 Version No: 2.0

**Input Set:****Output Set:**

**Started:** 2011-12-14 16:42:42.173  
**Finished:** 2011-12-14 16:42:45.679  
**Elapsed:** 0 hr(s) 0 min(s) 3 sec(s) 506 ms  
**Total Warnings:** 46  
**Total Errors:** 0  
**No. of SeqIDs Defined:** 118  
**Actual SeqID Count:** 118

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (1)
W 213	Artificial or Unknown found in <213> in SEQ ID (2)
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (4)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (8)
W 213	Artificial or Unknown found in <213> in SEQ ID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (14)
W 402	Undefined organism found in <213> in SEQ ID (20)
W 402	Undefined organism found in <213> in SEQ ID (21)
W 402	Undefined organism found in <213> in SEQ ID (22)
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W 402	Undefined organism found in <213> in SEQ ID (24)
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**Input Set:**

**Output Set:**

**Started:** 2011-12-14 16:42:42.173

**Finished:** 2011-12-14 16:42:45.679

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**Total Warnings:** 46

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**No. of SeqIDs Defined:** 118

**Actual SeqID Count:** 118

Error code	Error Description
W 402	Undefined organism found in <213> in SEQ ID (41)
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W 402	Undefined organism found in <213> in SEQ ID (45)
W 402	Undefined organism found in <213> in SEQ ID (46)
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W 402	Undefined organism found in <213> in SEQ ID (48)
W 402	Undefined organism found in <213> in SEQ ID (49)
W 402	Undefined organism found in <213> in SEQ ID (55)
W 402	Undefined organism found in <213> in SEQ ID (56)
W 402	Undefined organism found in <213> in SEQ ID (57)
W 402	Undefined organism found in <213> in SEQ ID (58)
W 402	Undefined organism found in <213> in SEQ ID (59) This error has occurred more than 20 times, will not be displayed
W 213	Artificial or Unknown found in <213> in SEQ ID (118)

# SEQUENCE LISTING

<110> ZOLLO, MASSIMO

<120> USE OF ENZYMATIC INHIBITORS OF H-PRUNE FOR THE PREVENTION AND  
TREATMENT OF THE METASTASES OF TUMOURS OVEREXPRESSING H-PRUNE

<130> 026073-00006

<140> 10582115

<141> 2011-12-14

<150> PCT/IT2004/000689

<151> 2004-12-10

<150> IT RM2003A000572

<151> 2003-12-11

<160> 118

<170> PatentIn version 3.5

<210> 1

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
primer

<400> 1

agagatcttg gacaggcaaa ct

22

<210> 2

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
primer

<400> 2

taggacctga cacagttgta cc

22

<210> 3

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
probe

<400> 3  
ctgcatggaa ccatc 15

<210> 4  
<211> 18  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
antigen for the monoclonal antibody anti h-PRUNE  
sequence

<400> 4  
Ala Leu Glu Glu Ala Val Ala Glu Val Leu Asp His Arg Pro Ile Glu  
1 5 10 15

Pro Lys

<210> 5  
<211> 42  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
primer

<400> 5  
gtagcagagg tgctagccgc tgcagccatc gagccgaaac ac 42

<210> 6  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
primer

<400> 6  
gaagcctgtg ctttggactc c 21

<210> 7  
<211> 33  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic

primer

<400> 7

accctcatcc ttgtcgtca tcatatctta tcc

33

<210> 8

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
primer

<400> 8

gaaccatcat cctggcatgt gtcaacatgg

30

<210> 9

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
inhibitor of h-prune H1 sequence

<400> 9

Asn	Ile	Ile	His	Gly	Ser	Asp	Ser	Val	Glu	Ser	Ala	Glu	Lys	Glu
1				5				10					15	

<210> 10

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
permeable inhibitor of h-prune H1 sequence

<400> 10

Asn	Ile	Ile	His	Gly	Ser	Asp	Ser	Val	Glu	Ser	Ala	Glu	Lys	Glu	Gly
1				5				10					15		

Gly	Gly	Tyr	Gly	Arg	Lys	Lys	Arg	Arg	Gln	Arg	Arg	Arg
			20				25					

<210> 11

<211> 167

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
h-prune sequence

<400> 11

Met Tyr Asp Val Pro Asp Tyr Ala Ser Leu Gly Ser Pro Val Glu Met  
1 5 10 15

Ala Asn Leu Glu Arg Thr Phe Ile Ala Ile Lys Pro Asp Gly Val Gln  
20 25 30

Arg Gly Leu Val Gly Glu Ile Ile Lys Arg Phe Glu Gln Lys Gly Phe  
35 40 45

Arg Leu Val Ala Met Lys Phe Leu Arg Ala Ser Glu Glu His Leu Lys  
50 55 60

Gln His Tyr Ile Asp Leu Lys Asp Arg Pro Phe Phe Pro Gly Leu Val  
65 70 75 80

Lys Tyr Met Asn Ser Gly Pro Val Val Ala Met Val Trp Glu Gly Leu  
85 90 95

Asn Val Val Lys Thr Gly Arg Val Met Leu Gly Glu Thr Asn Pro Ala  
100 105 110

Asp Ser Lys Pro Gly Thr Ile Arg Gly Asp Phe Cys Ile Gln Val Gly  
115 120 125

Arg Asn Ile Ile His Gly Ser Asp Ser Val Lys Ser Ala Glu Lys Glu  
130 135 140

Ile Ser Leu Trp Phe Lys Pro Glu Glu Leu Val Asp Tyr Lys Ser Cys  
145 150 155 160

Ala His Asp Trp Val Tyr Glu  
165

<210> 12

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
control peptide H1 (-) Casein kinase I sequence

<400> 12  
Ser Asp Glu Ile Gly Lys Val Ser Glu Asn Ile Ala His Ser Glu  
1 5 10 15

<210> 13  
<211> 14  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 13  
Gly Gly Gly Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg  
1 5 10

<210> 14  
<211> 13  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 14  
Asn Ile Ile His Gly Ser Asp Ser Val Lys Ser Ala Glu  
1 5 10

<210> 15  
<211> 28  
<212> PRT  
<213> Mycobacterium tuberculosis

<400> 15  
Val Gly Val Val Cys His Val His Pro Asp Ala Asp Thr Ile Gly Ala  
1 5 10 15

Gly Leu Ala Leu Ala Leu Val Leu Asp Gly Cys Gly  
20 25

<210> 16  
<211> 19  
<212> PRT  
<213> Mycobacterium tuberculosis

<400> 16  
Val Asp Leu Val Val Thr Val Asp Ile Pro Ser Val Asp Arg Leu Gly  
1 5 10 15



Ala Leu Gly

<210> 17  
<211> 13  
<212> PRT  
<213> Mycobacterium tuberculosis

<400> 17  
Arg Glu Leu Leu Val Ile Asp His His Ala Ser Asn Asp  
1                  5                  10

<210> 18  
<211> 44  
<212> PRT  
<213> Mycobacterium tuberculosis

<400> 18  
Ser Ala Asp Ser Thr Thr Thr Met Val Ala Glu Ile Leu Asp Ala Trp  
1                  5                  10                  15

Gly Lys Pro Ile Asp Pro Arg Val Ala His Cys Ile Tyr Ala Gly Leu  
                  20                  25                  30

Ala Thr Asp Thr Gly Ser Phe Arg Trp Ala Ser Val  
                  35                  40

<210> 19  
<211> 27  
<212> PRT  
<213> Mycobacterium tuberculosis

<400> 19  
Thr Val Asn Leu Ala Ala Val Ala Ser Gly Phe Gly Gly Gly Gly His  
1                  5                  10                  15

Arg Leu Ala Ala Gly Tyr Thr Thr Thr Gly Ser  
                  20                  25

<210> 20  
<211> 28  
<212> PRT  
<213> Synechocystis sp.

<400> 20  
Asp Leu Ile Leu Cys His Gln Thr Ala Asp Phe Asp Val Leu Gly Ala  
1                  5                  10                  15

Ala Val Gly Leu Ala Lys Leu His Pro Gly Ser Arg

20

25

<210> 21

<211> 19

<212> PRT

<213> Synechocystis sp.

<400> 21

Ile Arg Ser Leu Tyr Ile Val Asp Asn Gln Gln Gly Asp Arg Leu Gly  
1 5 10 15

Lys Ala Ala

<210> 22

<211> 13

<212> PRT

<213> Synechocystis sp.

<400> 22

Arg Gln Val Ala Ile Tyr Asp His His Leu Asn Ser Pro  
1 5 10

<210> 23

<211> 44

<212> PRT

<213> Synechocystis sp.

<400> 23

Ala Val Gly Ala Ser Thr Thr Leu Ile Val Glu Lys Leu Gln Arg Ala  
1 5 10 15

Asp Ile Ser Leu Ser Met Val Glu Ala Ser Val Met Ala Leu Gly Ile  
20 25 30

His Val Asp Thr Gly Ser Leu Thr Phe Thr Gln Thr  
35 40

<210> 24

<211> 27

<212> PRT

<213> Synechocystis sp.

<400> 24

Asp Thr Asp Leu Thr Gln Leu Leu Glu Pro Tyr Gly Gly Gly Gly His  
1 5 10 15

Ala Gln Ala Ala Ala Val Asn Leu Arg Asp Val  
20 25

<210> 25  
<211> 28  
<212> PRT  
<213> Mycoplasma genitalium

<400> 25  
Ile Val Ile Phe His His Val Arg Pro Asp Gly Asp Cys Leu Gly Ala  
1 5 10 15

Gln Gln Gly Leu Phe His Leu Ile Lys Ala Asn Phe  
20 25

<210> 26  
<211> 19  
<212> PRT  
<213> Mycoplasma genitalium

<400> 26  
Glu Ala Leu Ala Ile Val Val Asp Ala Asn Tyr Lys Asn Arg Ile Glu  
1 5 10 15

Leu Arg Glu

<210> 27  
<211> 13  
<212> PRT  
<213> Mycoplasma genitalium

<400> 27  
Lys Ala Val Leu Arg Ile Asp His His Pro Asn Glu Asp  
1 5 10

<210> 28  
<211> 44  
<212> PRT  
<213> Mycoplasma genitalium

<400> 28  
Ser Tyr Val Ala Cys Cys Glu Gln Ile Val Glu Met Ala Thr Val Ala  
1 5 10 15

Lys Trp Thr Ile Pro Pro Val Ala Ala Thr Leu Leu Tyr Ile Gly Ile  
20 25 30

Tyr Thr Asp Ser Asn Arg Phe Leu Tyr Ser Asn Thr  
35 40

<210> 29  
<211> 27  
<212> PRT  
<213> Mycoplasma genitalium

<400> 29  
Gly Ile Asn Val Arg Asp Ile Ala Ile Lys Tyr Gly Gly Gly Gly His  
1 5 10 15

Asn Asn Ala Ser Gly Ala Ile Ile Thr Asn Lys  
20 25

<210> 30  
<211> 28  
<212> PRT  
<213> Bacillus subtilis

<400> 30  
Ile Ile Leu His Arg His Val Arg Pro Asp Pro Asp Ala Tyr Gly Ser  
1 5 10 15

Gln Cys Gly Leu Thr Glu Ile Leu Arg Glu Thr Tyr  
20 25

<210> 31  
<211> 19  
<212> PRT  
<213> Bacillus subtilis

<400> 31  
Gly Ala Leu Val Ile Val Cys Asp Thr Ala Asn Gln Glu Arg Ile Asp  
1 5 10 15

Asp Gln Arg

<210> 32  
<211> 13  
<212> PRT  
<213> Bacillus subtilis

<400> 32  
Ala Lys Leu Met Lys Ile Asp His His Pro Asn Glu Asp  
1 5 10

<210> 33  
<211> 44  
<212> PRT  
<213> Bacillus subtilis

<213> Mycoplasma genitalium

<400> 33  
Ser Val Ser Glu Met Ile Tyr Glu Leu Tyr Leu Glu Gly Lys Glu His  
1 5 10 15

Gly Trp Lys Leu Asn Thr Lys Ala Ala Glu Leu Ile Tyr Ala Gly Ile  
20 25 30

Val Gly Asp Thr Gly Arg Phe Leu Phe Pro Asn Thr  
35 40

<210> 34  
<211> 27  
<212> PRT  
<213> Bacillus subtilis

<400> 34  
Gly Pro Val Ile Asn Gly Leu Ala Arg Lys Tyr Asn Gly Gly Gly His  
1 5 10 15

Pro Leu Ala Ser Gly Ala Ser Ile Tyr Ser Trp  
20 25

<210> 35  
<211> 28  
<212> PRT  
<213> Archaeoglobus fulgidus

<400> 35  
Leu Gly Ile Phe Thr His Asp Asn Pro Asp Pro Asp Ser Met Ser Ser  
1 5 10 15

Ala Tyr Ala Leu Arg Glu Ile Ala Lys Gln Phe Asp  
20 25

<210> 36  
<211> 19  
<212> PRT  
<213> Archaeoglobus fulgidus

<400> 36  
Tyr Asp Ala Phe Ala Ile Val Asp Ser Ser Gly Pro Gly Val Asn Asn  
1 5 10 15

Ser Ile Pro

<210> 37

<211> 13  
<212> PRT  
<213> Archaeoglobus fulgidus

<400> 37  
Asp Ile Ser Ile Val Ile Asp His His Pro Ala Glu Lys  
1 5 10

<210> 38  
<211> 44  
<212> PRT  
<213> Archaeoglobus fulgidus

<400> 38  
Asp Val Gly Ala Thr Ala Thr Ile Leu Thr Glu Tyr Ile Lys Glu Leu  
1 5 10 15

Lys Ile Thr Pro Ser Lys Ile Leu Ala Thr Ala Leu Phe Phe Gly Ile  
20 25 30

Lys Ser Glu Thr Asp Glu Phe Lys Arg Asn Thr Arg  
35 40

<210> 39  
<211> 27  
<212> PRT  
<213> Archaeoglobus fulgidus

<400> 39  
Glu Val Leu Arg Arg Ala Phe Gly Asp Val Gly Ser Ala Gly Gly His  
1 5 10 15

Ala His Ala Ala Gly Ala Gln Ile Pro Leu Gly  
20 25

<210> 40  
<211> 28  
<212> PRT  
<213> Methanocaldococcus jannaschii

<400> 40  
Asn Lys Ile Leu Ile Val Thr His Ile Asp Thr Asp Gly Leu Thr Ser  
1 5 10 15

Arg Ala Ile Leu Gln Lys Leu Ala Glu Arg Leu Asn  
20 25

<210> 41  
<211> 19

<212> PRT  
<213> Methanocaldococcus jannaschii

<400> 41  
Tyr Asp Leu Ile Ile Phe Ala Asp Leu Gly Ser Gly Gln Leu Lys Met  
1                  5                  10                  15

Ile Lys Glu

<210> 42  
<211> 13  
<212> PRT  
<213> Methanocaldococcus jannaschii

<400> 42  
Asp Lys Ile Ile Ile Leu Asp His His Gln Pro Glu Glu  
1                  5                  10

<210> 43  
<211> 44  
<212> PRT  
<213> Methanocaldococcus jannaschii

<400> 43  
Gly Ala Glu Ile Cys Gly Ala Gly Val Ser Tyr Leu Phe Ala Lys Ala  
1                  5                  10                  15

Ile Asn Asn Asp Trp Ile Asp Leu Ala Lys Tyr Ala Val Leu Gly Ala  
                  20                  25                  30

Val Gly Asp Ile Gln Asn Ile Glu Gly Lys Leu Ile  
                  35                  40

<210> 44  
<211> 27  
<212> PRT  
<213> Methanocaldococcus jannaschii

<400> 44  
Ala Ile Lys Tyr Ala Ser Glu Lys Val Asn Gly Ser Gly Gly Gly His  
1                  5                  10                  15

Lys Phe Ala Cys Gly Ala Tyr Ile Pro Asp Asn  
                  20                  25

<210> 45  
<211> 28  
<212> PRT

<213> Methanocaldococcus jannaschii

<400> 45

Arg	Pro	Ile	Ile	Ile	Arg	His	His	Ala	Asp	Thr	Asp	Gly	Tyr	Cys	Gly
1				5					10					15	

Gly	Ile	Ala	Leu	Glu	Lys	Ala	Ile	Leu	Pro	Ile	Ile
			20					25			

<210> 46

<211> 19

<212> PRT

<213> Methanocaldococcus jannaschii

<400> 46

Leu	Pro	Leu	Ile	Val	Leu	Ile	Asp	Asn	Gly	Ser	Thr	Asp	Glu	Asp	Ile
1				5					10					15	

Pro Ala Ile

<210> 47

<211> 13

<212> PRT

<213> Methanocaldococcus jannaschii

<400> 47

Ile	Glu	Val	Ile	Val	Ile	Asp	His	His	Phe	Pro	Gly	Glu
1				5					10			

<210> 48

<211> 44

<212> PRT

<213> Methanocaldococcus jannaschii

<400> 48

Lys	Gly	Arg	Thr	Tyr	Asp	Arg	Glu	Tyr	Leu	Glu	Lys	Ile	Ala	Leu	Cys
1				5					10					15	

Met	Asp	Phe	Glu	Ala	Phe	Tyr	Leu	Arg	Phe	Met	Asp	Gly	Lys	Gly	Ile
			20					25						30	

Val	Asp	Asp	Ile	Leu	Ala	Thr	Asn	Ile	Lys	Glu	Phe
			35						40		

<210> 49

<211> 27

<212> PRT

<213> Methanocaldococcus jannaschii



<400> 49  
Gln Leu Met Glu Glu Ile Pro Glu Ala Ser Leu Asp Gly Gly Gly His  
1 5 10 15

Glu Cys Ala Gly Ser Leu Lys Phe Val Glu Gly  
20 25

<210> 50  
<211> 28  
<212> PRT  
<213> Helicobacter pylori

<400> 50  
Met Gln Val Tyr His Leu Ser His Ile Asp Leu Asp Gly Tyr Ala Cys  
1 5 10 15

Gln Leu Val Ser Lys Gln Phe Phe Lys Asn Ile Gln  
20 25

<210> 51  
<211> 19  
<212> PRT  
<213> Helicobacter pylori

<400> 51  
Glu Phe Leu Ile Leu Val Ser Asp Leu Asn Leu Asn Leu Asn Glu Ala  
1 5 10 15

Glu Tyr Leu

<210> 52  
<211> 13  
<212> PRT  
<213> Helicobacter pylori

<400> 52  
Ile Gln Ile Gln Leu Leu Asp His His Ile Ser Gly Lys  
1 5 10

<210> 53  
<211> 44  
<212> PRT  
<213> Helicobacter pylori

<400> 53  
Ile Val Tyr Glu Phe Leu Lys Lys His Tyr Ala Ile Leu Glu Pro Lys  
1 5 10 15

Asn Thr Thr Trp Leu Glu Pro Leu Val Glu Met Val Asn Ser Val Asp  
20 25 30

Ile Trp Asp Thr Gln Gly Tyr Gly Phe Glu Leu Gly  
35 40

<210> 54  
<211> 27  
<212> PRT  
<213> Helicobacter pylori

<400> 54  
Cys Asp Val Cys Glu Leu Ser Gln Met Cys Phe Asn Gly Gly Gly His  
1 5 10 15

Arg Asn Ala Ser Gly Gly Lys Ile Asp Gly Phe  
20 25

<210> 55  
<211> 28  
<212> PRT  
<213> Haemophilus influenza

<400> 55  
Gln Lys Ile Val Ile Val Gly Asp Phe Asp Ala Asp Gly Ala Thr Ser  
1 5 10 15

Thr Ala Leu Ser Val Leu Ala Leu Arg Gln Leu Gly  
20 25

<210> 56  
<211> 19  
<212> PRT  
<213> Haemo